

MATERIAL SAFETY DATA SHEET

POTASSIUM PERMANGANATE
CAROLINA BIOLOGICAL

Revised: 05/15/08
Replaces: 04/10/08
Printed: 05/20/08

1. PRODUCT DESCRIPTION

Product Name: Potassium Permanganate
Product Code(s): 88-4130, 88-4148, 88-4150
Size: 125 g, 500 g
Chemical Name: Potassium Permanganate
CAS Number: 7722-64-7
Formula: KMnO_4
Synonyms: Permanganic acid, potassium salt
Distributor: Carolina Biological Supply Company
2700 York Road
Burlington, NC 27215

Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtrec (Transportation Spill Response 24 hours): 800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

Principal Hazardous Components: Potassium Permanganate
(CAS # 7722-64-7) 90-100%

TLV and PEL units: ACGIH-TLV 0.2 mg/m³ TWA for manganese and its
inorganic compounds, as Mn
OSHA-PEL 5 mg/m³ Ceiling for manganese
compounds, as Mn

3. HAZARD IDENTIFICATION

Emergency Overview: Oxidizer; contact with combustible material may cause fire. Harmful if inhaled or swallowed. Causes severe irritation of eyes, respiratory tract, and skin. Keep out of reach of children.

Potential Health Effects:

Eyes: May cause irritation.

Skin: May cause irritation.

Ingestion: May cause gastrointestinal discomfort.

Inhalation: May cause irritation to respiratory tract.

4. FIRST AID MEASURES

Emergency and First Aid Procedures:

Eyes - Flush with water for at least 15 minutes, raising and lowering eyelids occasionally. Get medical attention at once.

Skin - Thoroughly wash exposed area for at least 15 minutes. Remove contaminated clothing. Launder contaminated clothing before reuse. Get medical attention at once.

Ingestion - Do not induce vomiting. If swallowed, if conscious, give water immediately and get medical attention at once. Never give anything by mouth to an unconscious person.

Inhalation - Remove to fresh air. Give oxygen if breathing is difficult; give artificial respiration if breathing has stopped. Keep person warm and quiet, and get medical attention at once.

5. FIREFIGHTING PROCEDURES

Flash Point(Method Used): N/A

NFPA Rating: Health: 1
Fire: 0
Reactivity: 0
Other: OXIDIZER

Extinguisher Media:

Use dry chemical, CO₂ or appropriate foam.

Flammable Limits in Air % by Volume: N/A

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Autoignition Temperature: N/A
Special Firefighting Procedures:
Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.
Unusual Fire and Explosion Hazards: Strong oxidizer. Contact with combustible materials, flammable materials or powdered metals can cause fire or explosion.

6. SPILL OR LEAK PROCEDURES

Steps to be Taken in Case Material is Released or Spilled:
Ventilate area of spill. Clean-up personnel should wear proper protective equipment. Avoid creating dust. Sweep or scoop up and containerize for disposal.

7. SPECIAL PRECAUTIONS

Precautions to be Taken in Handling or Storing: Keep container tightly closed.
Other Precautions: Store separately and away from flammable and combustible materials.

8. SPECIAL PROTECTION INFORMATION

Respiratory Protection(Specify Type):
None needed under normal conditions of use with adequate ventilation.
NIOSH approved equipment should be worn if PELs are exceeded.
Ventilation:

Local Exhaust: Yes
Mechanical(General): Yes
Special: No
Other: No

Protective Gloves:
Rubber, neoprene, PVC, or equivalent.

Eye Protection:
Splash proof chemical safety goggles should be worn at all times.
Other Protective Clothing or Equipment:
Lab apron, eye wash, and safety shower.

9. PHYSICAL DATA

Molecular Weight:	158.04
Melting Point:	Approximately 240°C
Boiling Point:	N/A
Vapor Pressure:	N/A
Vapor Density(Air=1):	5.4
Specific Gravity(H2O=1):	2.7
Percent Volatile by Volume:	0 (21°C)
Evaporation Rate(H2O=1):	N/A
Solubility in Water:	Moderate (1-10%)
Appearance and Odor:	Dark purple to bronze crystals, odorless

10. REACTIVITY DATA

Stability: Stable
Conditions to Avoid: Heat
Incompatibility(Materials to Avoid): Organic materials, combustible materials, strong reducing agents, strong acids, peroxides, alcohols, chemically active metals.
Hazardous Decomposition Products: None
Hazardous Polymerization: Will not occur

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11. TOXICITY DATA

Toxicity Data: Oral Rat LD50: 750 mg/kg

Effects of Overexposure:

Acute: See section 3

Chronic: None

Conditions Aggravated by Overexposure: Excessive inhalation is irritating, may cause perforated septum. Severe irritation or burns on eyes and skin.

Target Organs: Respiratory system, central nervous system, blood, kidneys.

Primary Route(s) of Entry: Ingestion, inhalation

12. ECOLOGICAL DATA

EPA Waste Numbers: D001

13. DISPOSAL INFORMATION

Waste Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations.

Always contact a permitted waste disposer (TSD) to assure compliance.

14. TRANSPORT INFORMATION

Description: Potassium permanganate, 5.1, UN1490, II

15. REGULATORY INFORMATION

EPA TSCA Status: On TSCA Inventory

Hazard Category for SARA Section 311/312 Reporting: Acute

Product or Components	SARA EHS Sec. 302 TPQ	SARA Sec. 313 Chemicals		CERCLA Sec. 103 RQ lbs.	RCRA Sec. 261.33
		Name	Chemical List Category		
Potassium Permanganate	No	No	Manganese compound	100	No

16. ADDITIONAL INFORMATION

The information provided in this Material Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the Material Safety Data Sheet. Any employer must carefully assess the applicability of any information contained herein in regards to the particular use to which the employer puts the material.

Glossary

ACGIH.....American Conference of Governmental Industrial Hygienists

CAS Number..Chemical Abstracts Service Number

CERCLA.....Comprehensive Environmental Response, Compensation, and Liability Act

DOT.....U.S. Department of Transportation

IARC.....International Agency of Research on Cancer

mppcf.....million particles per cubic foot

N/A.....Not Available

NTP.....National Toxicology Program

OSHA.....Occupational Safety and Health Administration

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PEL.....Permissible Exposure Limit
ppm.....parts per million
RCRA.....Resource Conservation and Recovery Act
SARA.....Superfund Amendments and Reauthorization Act
TLV.....Threshold Limit Value
TSCA.....Toxic Substances Control Act